

RIC-250

LEUCO PRINTER

User Manual



Ver 1.0

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ABSTRACT OF PRODUCT

FOR YOUR SAFETY

WARNING

INSTALL THE PRINTER ON A FLAT, STABLE SURFACE

The printer may cause an injury if it falls or is dropped.

MAINTAIN GOOD VENTILATION

Ventilation slots are provided to keep the printer from overheating. Covering the slots may cause fire. To allow adequate air circulation, place the printer at least 10cm from any walls.

DO NOT PUT ANY OBJECT EXCEPT LEUCO CARD INTO THE PRINTER

Do not put any solid objects except LEUCO card or liquids such as water into the printer. In case of an accident, unplug your printer immediately and contact your dealer. Using the printer with any object inside except LEUCO card may cause fire, electric shock or damage.

DO NOT TURN OFF THE POWER WHILE OPERATING LEUCO CARD

Turn off the power while operating LEUCO card may cause damage.

DO NOT USE THE PRINTER NEAR WATER

Do not use where water may be splashed or split onto the monitor as it may cause fire or electric shock.

STOP OPERATING THE PRINTER WHEN YOU SENSE TROUBLE

If you notice any abnormal phenomena such as smoke, strange sounds or fumes, unplug your printer immediately and contact your dealer. Using the printer with any object except LEUCO card inside may cause fire, electric shock or damage.

NEVER REMOVE THE CABINET OR PRINTER UNIT

Removing the cabinet or printer unit may expose you to the danger of fire or electric shock.

OPERATE UNDER THE SPECIFIED POWER SUPPLY

Be sure to operate the monitor only with the specified power supply. Use of an incorrect voltage will cause malfunction and may cause fire or electric shock.

CAUTION

DO NOT TOUCH MOTOR OR THERMAL PRINT HEAD

Motor or thermal print head become high temperature while printer working. it may cause an injury if it touches directly.

DO NOT CONNECT THE POWER CONNECTOR OR COMMUNICATION CONNECTOR WHEN POWER SWITCH CONDITION IS ON.

DO NOT DISCONNECT THE POWER CONNECTOR OR COMMUNICATION CONNECTOR WHEN POWER SWITCH CONDITION IS ON.

● ABSTRACT OF PRODUCT

FEATURE

- This printer can both print and erase by a thermal print head, therefore it very energy conservation.
- This printer include function that both read and write for contact-less IC card of 13.56MHz .
- This function conforms to ISO14443A.
- This printer has both USB and RS-232C as communication function.

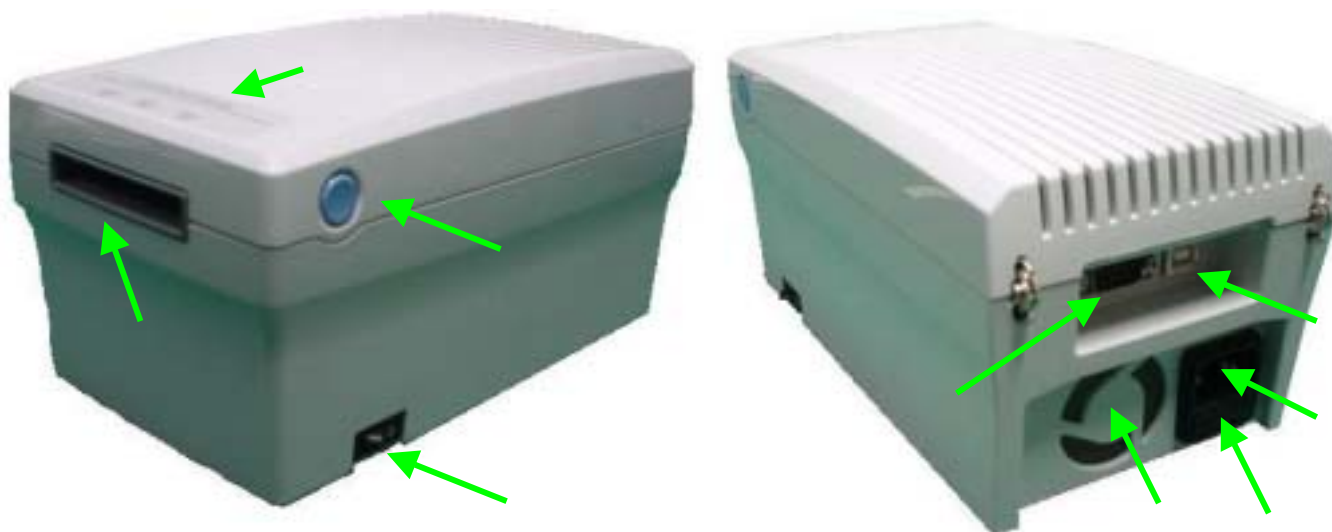
CHECKING THE CONTENTS OF THE PACKAGE

The following accessories are included in your package. Check to see if they are enclosed with the printer. If anything is missing or damaged. Please contact your dealer.

Accessories	Amount
Power cable	1
Kit of cleaning	1
User manual	1

● ABSTRACT OF PRODUCT

CONTROLS AND CONNECTORS



Connector for Power Cable

Fuse Holder

- Ratings 250V / 3A

Exhaust FAN

- To allow adequate air circulation, place the printer at least 10cm from any walls.

Connector for RS-232C

- D-SUB9pin

Connector for USB

- Type B

Power Switch

- Power indicator 【 - 】 Turn ON, 【 】 Turn off

Cover Open Switch

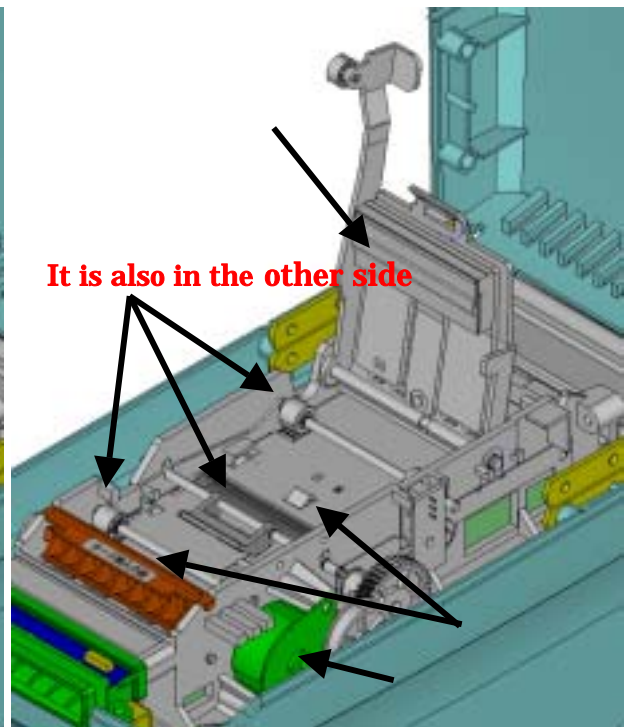
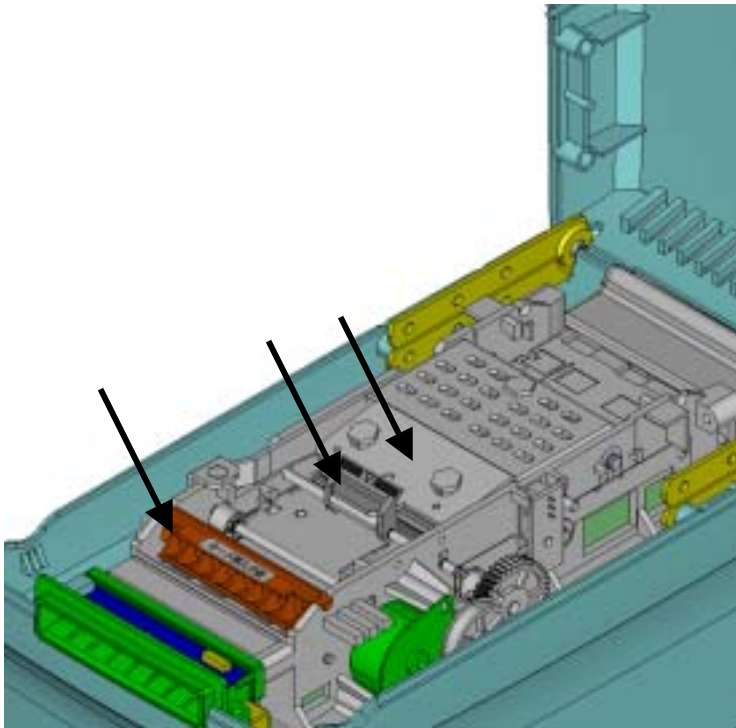
- When you open the cover, lift up the cover while pushing a right and left switch(blue).

Insertion entrance of card

Indicator lamp

- POWER Lamp[Green] ...Light = Power ON condition
- READY Lamp[Orange]...Light = Normal operation
- ERROR Lamp[Red] ...Light = Error condition

● ABSTRACT OF PRODUCT



Wiper

- The wiper remove dust of surface of card

Lever of head bracket

- The lever lock the head bracket.

Head Bracket

- Holder of Thermal print head

Thermal print head

- When you clean a thermal print head, please execute after a minute or more after power-off.
- Please do not strike close to home to a thermal head. It may cause damage.

Transfer belt

- This belt transfer a card.

Card sensor

Motor

● ABSTRACT OF PRODUCT

SPECIFICATIONS

ITEM		SPECIFICATIONS
Mechanism	Transfer of card	Belt
	Insertion entrance of card	1 place
	Transfer speed of card	Printing or Erasing ... Average 30[mm/s]
		Insertion or exhaust ... 100[mm/s] (atmosphere temp. \geq 13)
		90[mm/s] (13 >atmosphere temp. \geq 8)
		60[mm/s] (8 >atmosphere temp. \geq 5)
	Card sensor	2 places
	Temperature sensor	2 places (Thermal print head, Atmosphere)
	Cover sensor	1 place
	Cleaning of card	Wiper
	Exhaust heat fan	1 place
	Safety function	When the case cover is opened, the print operation is prohibited.
Printing	Printing	Thermal print head
	Erasing	Thermal print head
	Printing area	Long direction ... 72[mm]
		Short direction ... 38[mm]
	Resolution	Long direction ... 0.125[mm]
		Short direction ... 0.125[mm]
	Size of Font	Full type ... 24×24[dot]
		Half type ... 24×12[dot]
	Kind of Font	Kaku Gothic style(Japanese style)
RF	Graphic printing	Monochrome BMP file
	Barcode printing	QR、JAN8・13、ITF、CODE39、NW7
	Rotation	Rotation printing of 180degree

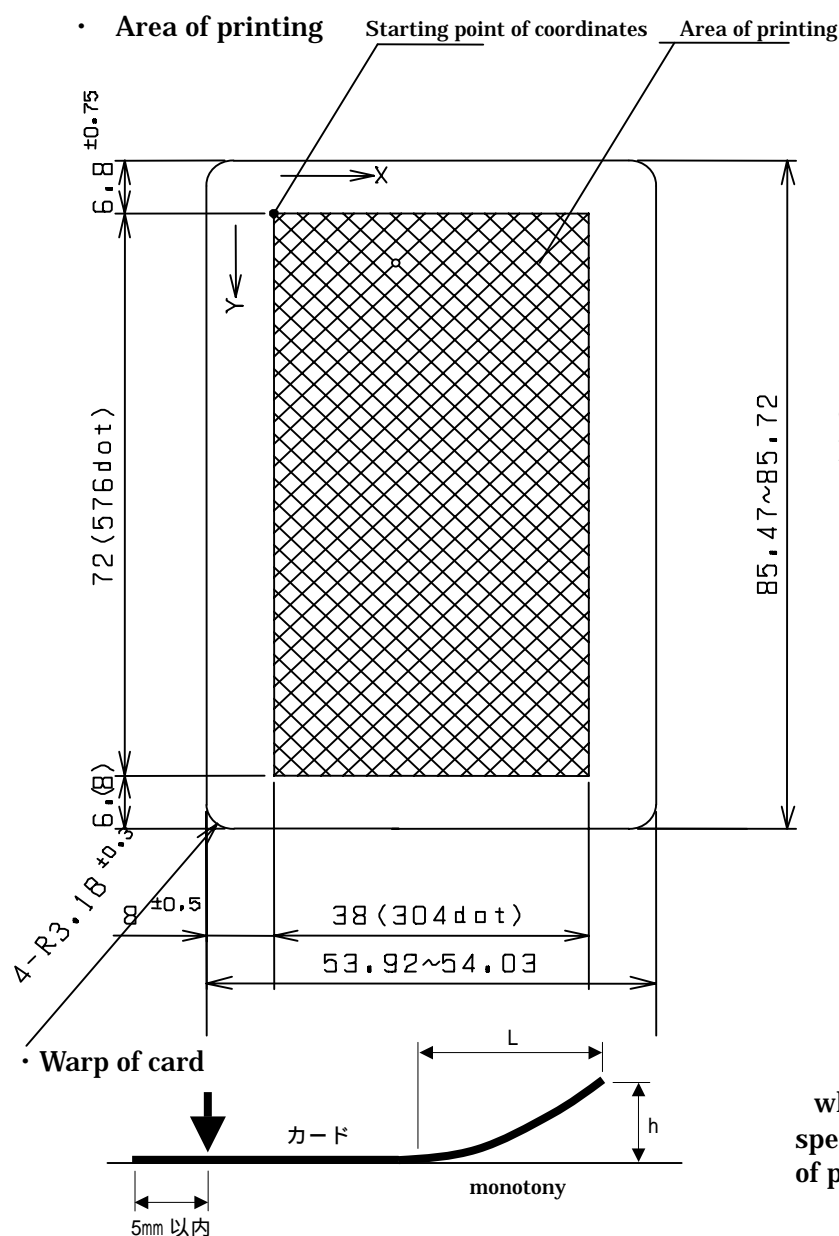
● ABSTRACT OF PRODUCT

ITEM		SPECIFICATION			
Communication	USB	Speed ... 1.2Mbps (Full speed)			
		Connector ... USBtypeB			
	RS-232C	Speed ... 2,400、4,800、9,600、19,200[bps] (Default : 19200[bps])			
		Transmission code ... 8bit			
		Parity ... None, Odd, Even (Default : Even)			
		Stop bit ... 1bit			
		Connector ... D-SUB9PIN(socket type)			
			Pin	Signal	Direction
			1	NC	Unused
			2	TxD	Out
			3	RxD	In
Power Supply	Input	AC 100V ± 10V			
	Frequency	50[Hz] / 60[Hz]			
	Power Consumption	50W (Max)			
	Current Consumption	Maximum current ... Peak 4.5[A]or less, Average 2.5[A]or less Standby current ... Average 0.3[A]or less			
Environment	Installation	Room			
	Operating temperature	5 ~ 35[], Recommendation 15 ~ 35[]			
	Operating humidity	20 ~ 60[%]RH No dewfall			
	Storage temperature	-10 ~ 60[]			
	Storage humidity	20 ~ 90[%]RH No dewfall			
Reliability	The life time	300,000 cards However, The life time of exchange parts are separately provided Exchange parts The life time of Thermal print head 150,000 cards The life time of Wiper about 500 cards The life time of the wiper changes according to the dirt condition of the system requirements and the card. The case where the wiper is dirty and the dirt of the card cannot be taken is end of the life time.			

● ABSTRACT OF PRODUCT

SPECIFICATIONS OF CARD

ITEM	SPECIFICATION
Standard	Conform to JIS X 6301
Outward form	85.47 ~ 85.72[mm] × 53.92 ~ 54.03[mm]
Thickness	0.76[mm] / 0.46[mm]
Area of printing	Refer to the figure below
Warp of card	<p>The card is put on monotony.</p> <p>H and L are measured as shown in the figure below.</p> <p>H and L meet the following requirements.</p> <ul style="list-style-type: none"> • h(long direction of card) ... 2.5[mm] or less • h(short direction of card) ... 1.5[mm] or less • L ... $h \times 10$[mm] or more



when the card that outside of warp specification is used, it may cause trouble of printing or transportation.

● INSTALLATION

INSTALLATION CONDITION

It is necessary to fill the following installation requirements.

It is necessary to fill an environmental specification (page no.8).

It is necessary to use the power supply outlet with the earth.

Secure space where there is no obstacle in the opening of the cover in the upper part of the printer.

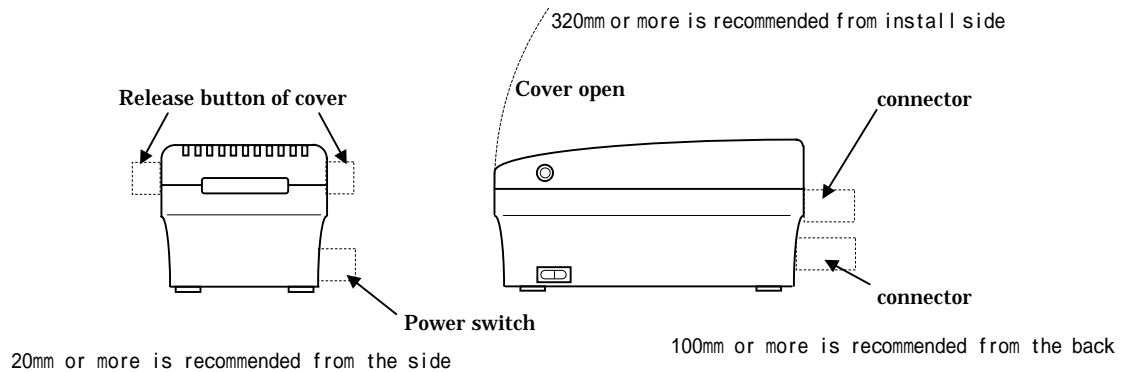
320mm or more is recommended from the installation side.

Confirm the thing that there is enough space for the connector and the cable in the back of the printer.

100mm or more is recommended from the back.

Confirm there is space where there is no obstacle in the power supply switch operation at the right of the printer.

20mm or more is recommended from the side.



CLEANING OF BELT

【Frequency of cleaning】

A cleaning once per every day or a cleaning once per 500cards is recommended
The above-mentioned frequency is a example, and it changes by the dirt condition etc.

【Cleaning method】

Clean it according to the instruction of the host system.

The cleaning card is prepared, and the cleaning liquid is soaked into both sides.

(Refer to the figure below.)

The case cover is opened.

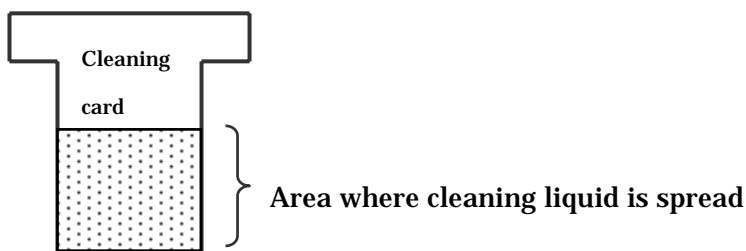
The cleaning card is inserted from the rear side of the device.(Refer to the figure below)

The case cover is closed.

The host system instructs cleaning.

The cover is opened after the cleaning is completed, and the cleaning card is taken out.

The case cover is closed.



The cleaning liquid is spread on the both side of lower area
if the cleaning liquid is not spread, it may be difficult to insert the cleaning card to the printer
and to complete the cleaning.



The cleaning card is inserted from the rear side, and it is set that the rear end of the card gets on the shaded portion in a left figure.

CLEANING OF THERMAL PRINT HEAD

【Frequency of cleaning】

Once cleaning per a day or per 500 cards is recommended.

The above-mentioned frequency is a example, and this frequency changes by the dirt condition.

When an imperfect point is generated on the print side, the cleaning may improve condition.

【Cleaning method】

The power supply of the printer is turned off, and the case cover is opened.

When it was used to immediately before, wait for one minute or more to cooling the head.

The lock of the head bracket is released by opening the lever, and the head bracket is opened.

Cotton bud is soaked with the cleaning liquid. The whole of glaze part of thermal print head is strongly wiped off with this cotton bud.

If the cotton bud will be dirty, it is necessary to repeat the cleaning by new cotton bud.

(Refer to the figure below.)

Do not touch the soldering part of the thermal print head.

Close a head bracket and lock the head bracket by the lever completely.

If the lock is not complete, it is not possible to print.

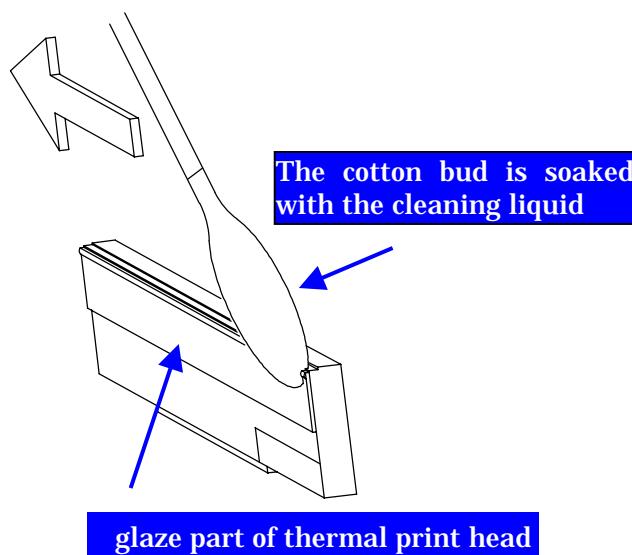
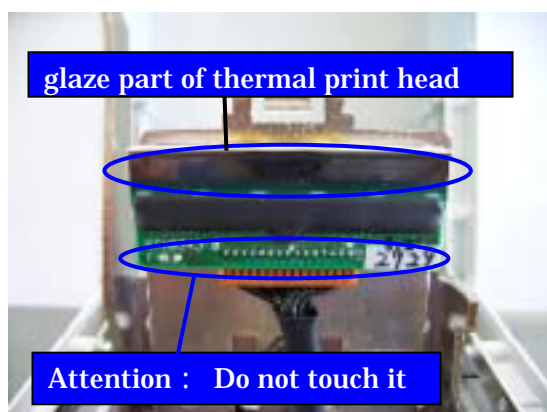
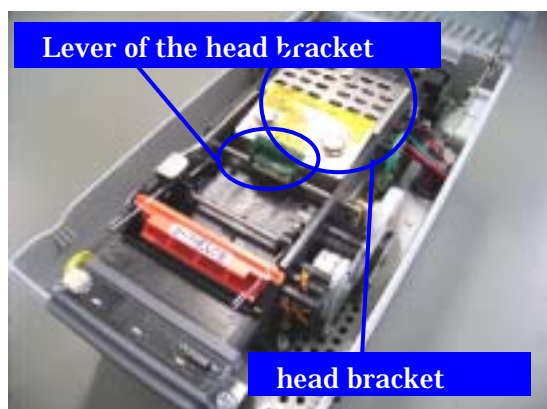


figure : A

The enlarged picture of the cleaning part

EXCHANGE OF WIPER

Exchange part : prepare for model number LP -0711

【Frequency of exchange】

The exchange of wiper per 500 cards is recommend.

The above-mentioned frequency is example, and this frequency changes by the dirt condition.

When the wiper become that can not prevent the dirty of card, exchange it to new wiper.

【Exchange method】

the case cover is opened.

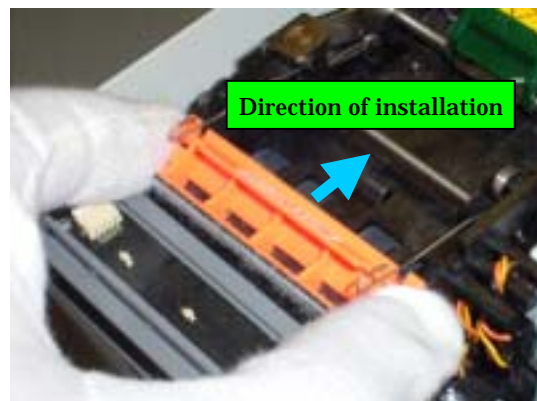
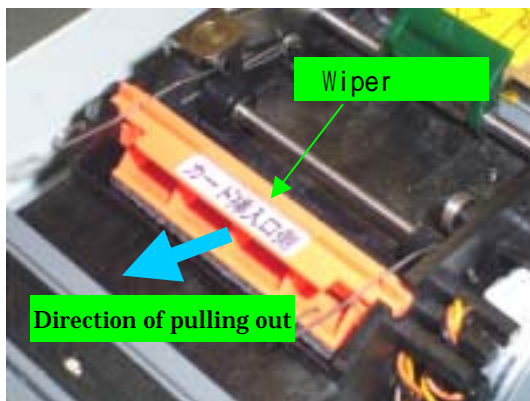
A used wiper is pulled out in the direction of the card insertion entrance.

The springs on both sides lift up and new wiper is installed.

The lift up of springs should be minimum requirement.

“カード挿入口” side of the wiper should be set to the same direction to the card insertion entrance.

Confirm that the wiper works smoothly.



FUSE EXCHANGE METHOD

Exchange part: 250V, 3A, 5*20mm

Power must be turned off ahead of exchanging.

【Exchange frequency】

The periodical exchange is not necessary.

When the printer does not work even if the power turn on, the fuse box that exists in the power supply inn let in the back is drawn out forward and confirm the state of the fuse.

【Exchange method】

Power must be turned off ahead of exchanging.

The fuse box that exists in the power supply Inn let in the back is drawn out forward.

A current fuse is exchanged to the new fuse.

DEMENTIONS

ITEM	CONTENTS
Outward	Full length 220[mm] X 120 in width[mm] X 110 in height[mm]
Weight	About 1.8[Kg]

